

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1 1. (currently amended) A unit-type roller drive
2 device of a size ~~as approximately high as~~ to fit within
3 a chair back rest portion of a chair with protruding
4 massaging ball rollers for engaging the back of the a
5 human user's body for motor-driven roller massage
6 actions, said chair back being separate from an
7 associated chair seat, comprising:

8 a frame ~~composed of~~ having left and right sides
9 extending longitudinally between upper and lower ends
10 and a frame thickness, a base portion, left and right
11 edge portions standing upright from the left and right
12 sides of the base portion to bound a space
13 corresponding with said frame thickness between said
14 upper and lower ends;

15 a longitudinal guide slit provided in each of the
16 left and right edge portions;

17 ~~a shaft~~ upper and lower shafts each having a gear
18 ~~and mounted to each of~~ respectively mounted to the
19 upper and lower ends of the frame;

20 ~~a roller chain~~ left and right roller chains
21 respectively mounted on each side of said frame in a

1 ring shape ~~round~~ around the upper and lower shafts in
2 and meshing with said gears; ~~and~~

3 a shaft bushing mounted to each roller chain and
4 ~~fixed to the~~ carrying said massaging ball rollers, the
5 left and right ends of said shaft bushings ~~being~~
6 including guide rollers mounted in ~~an inserted state in~~
7 said guide slits for guided movement along the slits;

8 a drive motor mounted to said frame operably
9 connected to said gears to move said roller chains and
10 massaging ball rollers between said upper and lower
11 ends of said frame;

12 ~~wherein the roller chains are moved vertically by~~
13 ~~rotation of the shafts with a drive motor, and in~~
14 ~~cooperation with the vertical movement of the roller~~
15 ~~chains, are guided in accordance with the guide slits~~
16 ~~for vertical movement~~ said guide slits and said roller
17 chains are substantially aligned within the thickness
18 of said frame when viewed in longitudinal section, and
19 said gears, roller chains and drive motor are contained
20 within said space corresponding with said frame
21 thickness to provide a compact device that may be
22 incorporated in a chair back with said massaging ball
23 rollers extending beyond said space corresponding with
24 said frame thickness to engage said user's back.

1 2. (currently amended) A unit-type roller device
2 for motor-driven roller massage actions according to
3 claim 1, wherein each shaft bushing has a plate-shaped
4 base portion fixed to ~~the opposite ends of each an~~
5 associated roller chain and a rising piece standing
6 upright from the surface of the base portion, ~~and is~~
7 ~~structured that~~ a pivotal massaging ball roller mount
8 piece is mounted to the rising piece for pivotal
9 movement about a horizontal axis, the massaging the
10 ball rollers are mounted to the massaging ball roller
11 mount piece, pins ~~are provided to be projecting~~ project
12 ~~from the back of~~ said base portion outwardly, and the
13 guide rollers are mounted to said pins ~~to insert the~~
14 ~~guide roller portions into the~~ and received within
15 guide slits to support and guide said shaft bushings.

1 3. (currently amended) A unit-type roller drive
2 device for motor-driven roller massage actions
3 according to claim 2, wherein the rising piece has a
4 triangular shape, ~~and in~~ the massaging ball roller
5 mount piece has a ~~shaped like a letter V and is~~
6 ~~structured that the~~ V-shape formed with side pieces
7 that incline in opposite directions and terminate at
8 top ends, said massaging ball rollers are mounted to
9 the respective top ends of ~~two-directional~~ the side

1 pieces of said massaging ball roller mount piece, and a
2 stopper ~~is provided to be projecting~~ projects from the
3 surface of each of said two side pieces.

1 4. (currently amended) A unit-type roller drive
2 device for motor-driven roller massage actions
3 according to claim 1, wherein sensors to vary the
4 turning direction of the drive motor ~~is~~ are provided on
5 one side edge portion of the frame in the vicinity of
6 the upper and lower shafts.

1 5. (previously presented) A motor-driven roller
2 massage instrument, comprising:
3 a bucket-shaped base body having a concave portion
4 provided in the center of the base body for
5 installation of the roller drive device and left and
6 right flexible blade piece portions formed on the left
7 and right sides of said concave portion; and
8 belts mounted to the left and right blade piece
9 portions to fasten the user body and also to fasten the
10 other appliance;
11 wherein the roller drive device according to claim
12 1, is installed in said concave portion for
13 installation of the roller drive device.

14 6. (previously presented) A motor-driven roller
15 massage instrument, comprising:
16 an outside frame surrounding a bucket-shaped
17 portion on all sides; and
18 upper and lower lateral rods mounted across the
19 left and right frame portions of the outside frame and
20 respectively having concave portions;
21 wherein the roller drive device according to claim
22 1, is installed in said concave portions.

1 7. (previously presented) A legless chair mounted
2 with a motor-driven roller massage instrument,
3 comprising:
4 a back portion rotatably mounted to a seat portion
5 and having an outside frame surrounding the back
6 portion on its upper, left and right sides;
7 upper and lower lateral rods mounted across the
8 left and right sides of the outside frame and
9 respectively having concave portions;
10 wherein the roller drive device according to claim
11 1, is installed in said concave portions.

1 8. (currently amended) A unit-type roller drive
2 device for motor-driven roller massage actions
3 according to claim 2, wherein sensors to vary the

4 turning direction of the drive motor ~~is~~ are provided on
5 one side edge portion of the frame in the vicinity of
6 the upper and lower shafts.

1 9. (currently amended) A unit-type roller drive
2 device for motor-driven roller massage actions
3 according to claim 3, wherein sensors to vary the
4 turning direction of the drive motor ~~is~~ are provided on
5 one side edge portion of the frame in the vicinity of
6 the upper and lower shafts.

1 10. (previously presented) A motor-driven roller
2 massage instrument, comprising:
3 a bucket-shaped base body having a concave portion
4 provided in the center of the base body for
5 installation of the roller drive device and left and
6 right flexible blade piece portions formed on the left
7 and right sides of said concave portion; and
8 belts mounted to the left and right blade piece
9 portions to fasten the user body and also to fasten the
10 other appliance;
11 wherein the roller drive device according to claim
12 2, is installed in said concave portion for
13 installation of the roller drive device.

1 11. (previously presented) A motor-driven roller
2 message instrument, comprising:
3 a bucket-shaped base body having a concave portion
4 provided in the center of the base body for
5 installation of the roller drive device and left and
6 right flexible blade piece portions formed on the left
7 and right sides of said concave portion; and
8 belts mounted to the left and right blade piece
9 portions to fasten the user body and also to fasten the
10 other appliance;
11 wherein the roller drive device according to claim
12 3, is installed in said concave portion for
13 installation of the roller drive device.

1 12. (previously presented) A motor-driven roller
2 message instrument, comprising:
3 a bucket-shaped base body having a concave portion
4 provided in the center of the base body for
5 installation of the roller drive device and left and
6 right flexible blade piece portions formed on the left
7 and right sides of said concave portion; and
8 belts mounted to the left and right blade piece
9 portions to fasten the user body and also to fasten the
10 other appliance;

11 wherein the roller drive device according to claim
12 4, is installed in said concave portion for
13 installation of the roller drive device.

1 13. (previously presented) A motor-driven roller
2 massage instrument, comprising:
3 an outside frame surrounding a bucket-shaped
4 portion on all sides; and
5 upper and lower lateral rods mounted across the
6 left and right frame portions of the outside frame and
7 respectively having concave portions;
8 wherein the roller drive device according to claim
9 2, is installed in said concave portions.

1 14. (previously presented) A motor-driven roller
2 massage instrument, comprising:
3 an outside frame surrounding a bucket-shaped
4 portion on all sides; and
5 upper and lower lateral rods mounted across the
6 left and right frame portions of the outside frame and
7 respectively having concave portions;
8 wherein the roller drive device according to claim
9 3, is installed in said concave portions.

1 15. (previously presented) A motor-driven roller
2 massage instrument, comprising:
3 an outside frame surrounding a bucket-shaped
4 portion on all sides; and
5 upper and lower lateral rods mounted across the
6 left and right frame portions of the outside frame and
7 respectively having concave portions;
8 wherein the roller drive device according to claim
9 4, is installed in said concave portions.

1 16. (previously presented) A legless chair
2 mounted with a motor-driven roller massage instrument,
3 comprising:
4 a back portion rotatably mounted to a seat portion
5 and having an outside frame surrounding the back
6 portion on its upper, left and right sides;
7 upper and lower lateral rods mounted across the
8 left and right sides of the outside frame and
9 respectively having concave portions;
10 wherein the roller drive device according to claim
11 2, is installed in said concave portions.

1 17. (previously presented) A legless chair
2 mounted with a motor-driven roller massage instrument,
3 comprising:

4 a back portion rotatably mounted to a seat portion
5 and having an outside frame surrounding the back
6 portion on its upper, left and right sides;
7 upper and lower lateral rods mounted across the
8 left and right sides of the outside frame and
9 respectively having concave portions;
10 wherein the roller drive device according to claim
11 3, is installed in said concave portions.

1 18. (previously presented) A legless chair
2 mounted with a motor-driven roller massage instrument,
3 comprising:
4 a back portion rotatably mounted to a seat portion
5 and having an outside frame surrounding the back
6 portion on its upper, left and right sides;
7 upper and lower lateral rods mounted across the
8 left and right sides of the outside frame and
9 respectively having concave portions;
10 wherein the roller drive device according to claim
11 4, is installed in said concave portions.